

## **CLAIMS**

### **What is claimed is:**

1. A gateway serving as an interface between a mobile network and a wireless network, wherein said gateway is configured to send a signal strength indicator to the mobile network thereby causing the mobile network to recognize the gateway as a valid path for handing off a call.
2. The gateway of claim 1, wherein the signal strength indicator is fabricated.
3. The gateway of claim 1, wherein the wireless network is configured according to one of the 802.11 wireless communications protocols.
4. The gateway of claim 1, wherein the gateway routes the call from the mobile network to a wireless access point of the wireless network via a packet-switched network, such that the call is conducted via a wireless communications link using the wireless access point.
5. The gateway of claim 1, further comprising:
  - a mobile network interface comprising a transport interface configured to exchange mobile control channel signaling data with the mobile network and a voice channel interface configured to exchange audio data with the mobile network;
  - a mobile control and messaging component configured to communicate with the mobile network via said transport interface;
  - a call control component configured to format the mobile control channel signaling data from the mobile network for use over the packet-switched network;
  - a voice media conversion component configured to format voice data for sending using a real-time streaming protocol over the packet-switched network; and
  - an interface to exchange call control data and voice data with the packet-switched network.

6. The gateway of claim 5, wherein the interface to the packet-switched network is a Session Initiation Protocol interface.

7. Within a gateway interface, a method of call control between a mobile network and a wireless network comprising:

establishing, with a mobile network, a control messaging link for exchanging mobile control channel signaling data and a voice channel link for exchanging audio data for a mobile call;

sending a signal strength indicator to the mobile network thereby causing the mobile network to recognize the gateway as a valid path for handing off the mobile call;

establishing a communications link with a packet-switched network; and

routing the mobile call from the mobile network to a wireless access point via the packet-switched network, such that the call is conducted via a wireless communications link using the wireless access point.

8. The method of claim 7, wherein the signal strength indicator is fabricated.

9. The method of claim 7, said routing step comprising routing the mobile call to the wireless access point via the packet-switched network using Session Initiation Protocol.

10. The method of claim 7, wherein the wireless access point is an 802.11 compliant wireless access point and the wireless network is configured according to one of the 802.11 wireless communications protocols.

11. A system for call control between a mobile network and a wireless network comprising:

means for establishing, with a mobile network, a control messaging link for exchanging control signal channel signaling data and a voice channel link for exchanging audio data for a mobile call;

means for sending a signal strength indicator to the mobile network thereby causing the mobile network to recognize the system as a valid path for handing off the mobile call;

means for establishing a communications link with a packet-switched network;  
and

means for routing the mobile call from the mobile network to a wireless access point via the packet-switched network, such that the call is conducted via a wireless communications link using the wireless access point.

12. The system of claim 11, wherein the signal strength indicator is fabricated.

13. The system of claim 11, said means for routing further comprising means for routing the mobile call to the wireless access point via the packet-switched network using Session Initiation Protocol.

14. The system of claim 11, wherein the wireless access point is an 802.11 compliant wireless access point and the wireless network is configured according to one of the 802.11 wireless communications protocols.

15. A machine readable storage, having stored thereon a computer program having a plurality of code sections executable by a machine for causing the machine to perform the steps of:

establishing, with a mobile network, a control messaging link for exchanging mobile control channel signaling data and a voice channel link for exchanging audio data for a mobile call;

sending a signal strength indicator to the mobile network thereby causing the mobile network to recognize the gateway as a valid path for handing off the mobile call;

establishing a communications link with a packet-switched network; and

routing the mobile call from the mobile network to a wireless access point via the packet-switched network, such that the call is conducted via a wireless communications link using the wireless access point.

16. The machine readable storage of claim 15, wherein said signal strength indicator is fabricated.

17. The machine readable storage of claim 15, said routing step comprising routing the mobile call to the wireless access point via the packet-switched network using Session Initiation Protocol.

18. The machine readable storage of claim 15, wherein the wireless access point is an 802.11 compliant wireless access point and the wireless network is configured according to one of the 802.11 wireless communications protocols.